

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER N-10-064A

Relating to ARB Approval for an Exemption from Third Party Certification for
Composite Wood Product Manufacturers that use
Ultra-low-emitting Formaldehyde Resins under
section 93120.3, title 17, California Code of Regulations

Flexible Materials, Inc. (Flexible Materials)

WHEREAS, the Air Resources Board (ARB) has adopted the "Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products" (the "ATCM"; title 17, California Code of Regulations, sections 93120-93120.12), which establishes formaldehyde emission standards for composite wood products;

WHEREAS, section 93120.1(a)(42) of the ATCM defines "ultra-low-emitting formaldehyde (ULEF) resins" to mean "resins formulated such that average formaldehyde emissions are consistently below the Phase 2 emission standards in section 93120.2," for making hardwood plywood, particleboard, or medium density fiberboard;

WHEREAS, section 93120.3(d) of the ATCM allows manufacturers of hardwood plywood, particleboard, and medium density fiberboard who use ULEF resins to apply for written approval from the Executive Officer for an exemption from the requirements of section 93120.3(b) of the ATCM;

WHEREAS, section 93120.3(d) of the ATCM allows manufacturers of hardwood plywood, particleboard, and medium density fiberboard who use ULEF resins to submit an application for an exemption from the requirements of section 93120.3(b) of the ATCM to the Executive Officer, which includes: (A) a statement indicating which product types will be manufactured using ULEF resins for sale in California; (B) the chemical formulation of the candidate ULEF resin(s), including base resins, scavenger resins, scavenger additives, catalysts, and other additives as used in manufacturing; (C) the name of their ARB approved third party certifier; and (D) data on the emissions performance of the candidate ULEF resin(s);

WHEREAS, the data on emissions performance of the candidate ULEF resin required in section 93120.3(d) of the ATCM must be obtained by working with an ARB approved third party certifier, and must include six months of routine quality control testing data, the correlation of the routine quality control testing data to primary or secondary testing data, and the results of two primary or secondary method tests, as required in Appendix 2 of section 93120.12 of the ATCM;

WHEREAS, section 93120.3(d)(2) of the ATCM requires that ninety percent of the six months of routine quality control testing data and the results of two primary or secondary method tests must be shown to be no higher than 0.04 ppm, and that all data must be shown to be no higher than 0.05 ppm for hardwood plywood and 0.06 ppm for particleboard, medium density fiberboard, and thin medium density fiberboard;

WHEREAS, section 93120.3(d)(5) of the ATCM provides that the Executive Officer shall approve the application and issue an Executive Order if the evidence submitted by the applicant is sufficient to demonstrate that the applicant has met the requirements specified in sections 93120.3(d)(1) and 93120.3(d)(2) of the ATCM;

WHEREAS, Flexible Materials, Inc. (Flexible Materials or the "applicant") submitted an application that we received on May 10, 2010;

WHEREAS, the application from Flexible Materials was deemed complete on June 29, 2010;

WHEREAS, the application from Flexible Materials specifies the range in product manufacturing parameters, applicable post-press product treatments, base resin trade name(s) and base resin manufacturer(s)/supplier(s), and other ingredients added to the base resin by the applicant to manufacture ULEF products;

WHEREAS, ARB was provided base resin/adhesive information specifying the base resin polymer type and minimum and maximum values of all major and any minor ingredients in the base resin on a percent weight of solids basis;

WHEREAS, the base resin/adhesive information was provided to ARB by Momentive Specialty Chemical, formally Hexion Specialty Chemicals (Flexible Materials' resin supplier), and Crucible Chemical Company (Momentive's chemical ingredients supplier), and is set forth in Confidential Attachments A, B and C;

WHEREAS, the application from Flexible Materials specifies the range in product manufacturing parameters, applicable post-press product treatments, use of composite wood products with formaldehyde emissions no greater than Phase 1 emission levels, as substrates in hardwood plywood – composite core products, base resin trade name(s) and base resin manufacturer(s)/supplier(s), and other ingredients added to the base resin by the applicant to manufacture ULEF products;

WHEREAS, Flexible Materials was issued Executive Order N-10-064 signed on September 16, 2010, listing one base resin system in Confidential Attachment A;

WHEREAS, Flexible Materials submitted a request and supplementary documentation to ARB on October 6, 2010, for approval to add a second base resin to Confidential Attachment A;

WHEREAS, the application and request submitted on October 6, 2010, demonstrates that the second base resin system is the same type of base resin system as listed in Confidential Attachment A of Executive Order N-10-064;

WHEREAS, Flexible Materials has provided confirmatory testing for the second resin system by providing the results of two secondary method tests on ULEF products made with the second resin system that are no higher than 0.04 ppm;

WHEREAS, following submission of confidential chemical formulation data for the second base resin system from Momentive Specialty Chemicals, the application from Flexible Materials was deemed complete on December 6, 2010;

WHEREAS, Flexible Materials provided the required secondary method testing data and chemical formulation data to add a second resin system, it is appropriate that Executive Order N-10-064 be superseded by this Executive Order N-10-064A;

WHEREAS, section 93120.3(d)(5) of the ATCM provides that the Executive Officer shall approve the application and issue an Executive Order if the evidence submitted by the applicant is sufficient to demonstrate that the applicant has met the requirements specified in section 93120.3(d)(1) of the ATCM;

WHEREAS, the Executive Officer finds that the evidence submitted by the applicant meets the criteria specified in sections 93120.3(d)(1), 93120.3(d)(2) and 93120.3(d)(5) of the ATCM;

NOW, THEREFORE, IT IS ORDERED that Flexible Materials is hereby approved as a ULEF manufacturer of hardwood plywood-composite core products that is exempt from the requirements of section 93120.3(b) and Appendix 2 of section 93120.12 of the ATCM, provided that the following terms and conditions are met for products sold, supplied, offered for sale, or manufactured for sale in California;

1. Flexible Materials must use the commercial resins listed and suppliers listed in section A of Confidential Attachment A of this Executive Order for the manufacture of ULEF-exempt hardwood plywood-composite core products.

2. Flexible Materials must use CARB certified composite core products that meet phase 1 or phase 2 emission standards for the manufacture of ULEF-exempt hardwood plywood-composite core products.
3. The chemical formulation of the base resins used for the manufacture of ULEF hardwood plywood-composite core products by Flexible Materials must be within the ranges specified in section B of Confidential Attachment A of this Executive Order.
4. As specified in section B of Confidential Attachment A, Flexible Materials is legally responsible for insuring that the base resin is within the ranges specified in section B.
5. The application rate of the base resins used for the manufacture of ULEF composite wood products by Flexible Materials must be within the ranges specified in section C of Confidential Attachment A of this Executive Order.
6. Other chemical components of the base resins (such as sizing wax and release wax) used for the manufacture of ULEF-exempt hardwood plywood-composite core products by Flexible Materials must be within the ranges specified in section D of Confidential Attachment A of this Executive Order.
7. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the ULEF-exempt hardwood plywood-composite core products by Flexible Materials must be within the ranges specified in section E of Confidential Attachment A of this Executive Order.
8. Only the composite wood products with the product names listed in section F of Confidential Attachment A of this Executive Order are authorized under this Executive Order.

BE IT FURTHER ORDERED that Flexible Materials may change the resin system supplier listed in section A of Confidential Attachment A of this Executive Order if the new resin supplier supplies the same resin type listed in Confidential Attachment A of this Executive Order, at least two primary or secondary method tests are performed on random samples selected by their ARB-approved third party certifier, and the Chief of the Air Quality Measures Branch of the Stationary Source Division is notified before Flexible Materials uses the resin for production.

BE IT FURTHER ORDERED that Flexible Materials must conduct confirmatory testing for a new resin supplier by demonstrating that the results of two primary or secondary method tests for the new resin system supplier are no higher than 0.04 ppm for the ULEF products authorized under this Executive Order;

BE IT FURTHER ORDERED that this amended Executive Order N-10-064A shall have a duration of two years from the date the original Executive Order N-10-064 was signed, September 16, 2010; the applicant may apply for re-approval as provided in section 93120.3(d)(5) of the ATCM.

BE IT FURTHER ORDERED that the applicant must maintain records in electronic or hard copy form for two years, for review by ARB upon request, as specified in section 93120.3(g) of the ATCM.

BE IT FURTHER ORDERED that the applicant must notify the Executive Officer in writing within 30 days if there is any change in their product manufacturing parameters or base resin manufacturer(s) or supplier(s) that does not comply with any of the requirements, terms or conditions specified in the ATCM or this Executive Order.

Executed at Sacramento, California this 14th day of February, 2011.



Janette M. Brooks, Chief
Air Quality Measures Branch
Stationary Source Division

